SCOPE OF CLAIMED INVENTION

1. A method for examining foreign matters in through holes characterized in that light passing through a plurality of through holes having a uniform size is simultaneously taken as image data, a number of light receiving regions corresponding to the imaged respective through holes, each being treated as a mass, is initially counted, and a process to determine presence or absence of foreign matters is conducted by mutually comparing areas of adjacent ones of the light receiving regions for only a work piece with a counted value of light receiving regions being concurred with a specified value.

2. A method for examining foreign matters in through holes according to claim 1, wherein the counting of light receiving regions is conducted only for those of the extracted light receiving regions whose area values are within a specified range.

3. A method for examining foreign matters in through holes according to claim 1, wherein, when the number of light receiving regions counted in the step of counting the number of light receiving regions does not concur with a specified value, the examination is ended.

4. A method for examining foreign matters in through holes characterized in that light passing through a plurality of through holes having a uniform size is simultaneously taken as image data, a number of light receiving regions corresponding to the imaged respective through holes is initially counted subject to the extracted light receiving regions having area values being within a specified range, a process to determine presence or absence of foreign matters is performed by mutually comparing adjacent ones of the light receiving regions for only a work piece with a light receiving region count value being concurred with a specified value, and the examination is ended when the number of the light receiving regions counted in the step of counting the number of light receiving region does not concur with a specified value.

5. A method for examining foreign matters in through holes characterized in that light passing through a plurality of through holes having a uniform size is simultaneously taken as image data, the image data is divided into groups and read for each examination region, the number of imaged light receiving regions corresponding to the respective through holes in the examination region is initially counted, and a process to determine presence or absence of foreign matters is performed by mutually comparing areas of adjacent ones of the light receiving regions for only a work piece with a counted number of light receiving regions being concurred with a set value.

6. A method for examining foreign matters in through holes according to claim 1, wherein an image is taken with an imaging focal point of a sensor camera being shifted from a surface of the work piece, such that the image is taken with an image area of light passing through the through hole being expanded.